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Report No. 8678

PROJECT COMPLETION REPORT

KOREA

**SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT
(LOAN 2215-KO)**

MAY 29, 1990

**Industry and Energy Operations Division
Country Department II
Asia Regional Office**

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Office of Director-General
Operations Evaluation

May 29, 1990

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Project Completion Report on Korea
Small and Medium Machinery Industry Project (Loan 2215-K0)

Attached, for information, is a copy of a report entitled "Project Completion Report on Korea - Small and Medium Machinery Industry Project (Loan 2215-K0)" prepared by the Industry and Energy Operations Division of the Asia Regional Office with Part II of the report contributed by the Borrower. No audit of this project has been made by the Operations Evaluation Department at this time.

A handwritten signature in black ink, appearing to be 'L. H. H. H.', is written over the signature line.

Attachment

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PROJECT COMPLETION REPORT

KOREA

SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-KO)

PREFACE

This is the Project Completion Report (PCR) for the Small and Medium Machinery Industry project in Korea, for which Loan 2215-KO in the amount of US\$70.0 million was approved on December 16, 1982. The loan was made to four Project Entities: Small and Medium Industry Promotion Corporation (SMIPC), Small and Medium Industry Bank (SMIB), Korea Long Term Credit Bank (KLB), and Citizens National Bank (CNB). The loan closed on December 31, 1987, one year behind schedule, with about US\$23.9 million of the loan amount undisbursed and cancelled. The last disbursement was made on February 16, 1988.

The PCR was prepared by the Industry and Energy Operations Division, Country Department II, Asia Region (Preface, Evaluation Summary, Parts I and III). During a supervision mission on a follow-up project in March, 1989, the mission discussed Parts I and III of the report with the Project Entities. The mission received minor comments which have been incorporated in the report.

Preparation of this PCR was initiated during a Bank supervision mission in February, 1988. The Project Entities agreed to the following: that SMIPC would prepare an outline of the PCR for its component; that CNB would do a combined PCR for its two loans (Loan 2144-KO and 2215-3KO); that SMIB would do a combined PCR for Loans 2004-KO and 2215-1KO; and that KLB, due to its minor participation in the project, would not prepare a PCR for its portion but instead furnish the Bank with statistical data. SMIPC and CNB completed their respective PCRs in March, 1988 and July, 1988. The SMIPC PCR is included as Part II to this report while the CNB PCR has been included in an earlier report for the Second CNB Project (Loan 2144-KO).

This PCR is based, inter alia, on the Staff Appraisal Report; the Loan, Guarantee and Project Agreements; supervision reports; correspondence between the Bank and the Project Entities; internal Bank memoranda; the Project Entities' annual reports and project data provided by the Project Entities.

PROJECT COMPLETION REPORT

KOREA

SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT
(LOAN 2215-KO)

EVALUATION SUMMARY

1. The project loan for US\$70 million to the Republic of Korea was approved on December 16, 1982. It followed a series of lines of credit to development finance companies (DFCs) serving the small and medium industry (SMI). This project represented a new Bank approach to SMI lending in Korea by: first, including three key DFCs involved in the SMI sector in a single project; second, explicitly addressing the issue of industrial extension services to SMIs as a project component; and third, focusing on a specific developmental bottleneck, in this case, the machinery industry. The major project objectives were to: (a) provide long-term resources to SMIB, CNB and KLB to support the requirements for establishment, expansion, modernization, and balancing of facilities by small and medium machinery producers; (b) provide technical assistance and training through the Small and Medium Industry Promotion Corporation (SMIPC), aimed at upgrading the technical competence and productivity of the machinery industries; and (c) develop the institutional capability of SMIPC to provide industrial extension services to SMIs. The project had three components: technical assistance, training, and credit (para. 3.01-3.04).

2. The project fulfilled its technology upgrading objectives, but experienced significant difficulties in achieving resource transfer goals. The technical assistance component was highly successful. The project developed a user oriented industrial extension service scheme, the Production Technology Improvement Program (PROTIP), formulated with Bank assistance provided in the course of sector work. Under the program, foreign and domestic consultancy services were provided to assist small and medium machinery producers to upgrade skills and improve their productivity at the plant-level by more effectively using existing technology. Unlike traditional extension services where agents teach what they know with limited regard to the needs of SMIs, the focus of the assistance was on solving the basic technical problems routinely encountered by SMIs. These services, often provided by retired or semi-retired free lance engineers, foremen and technicians working as consultants, were highly responsive to SMI needs and were well received. Some 1,030 man-months of expatriate technical assistance services were provided under PROTIP, about 16% more than originally anticipated. Through PROTIP, SMIPC has developed effective approaches to problem diagnosis, problem solving and systems of documentation conducive to genuine transfer of technology (para. 5.05-5.07).

3. It had originally been hoped that the project would promote increased cost recovery for the technical assistance services provided, but this did not materialize. This was due to the SMIs' limited ability to pay and their general tendency to expect basic software assistance free of charge. In an apparent effort to redress its relative neglect of the SMI sector during the 1970s, the Government did not pursue the cost recovery policy (para. 5.08).

4. Against the original budget of US\$ 800,000, only US\$ 373,000 was disbursed for the training component. This was mainly due to training grant funds provided by bilateral sources. In addition, overseas training under the project was limited by difficulties in identifying SMI managers interested and able to afford such training (para. 5.04).

5. The credit component experienced major delays due primarily to competition from a subsidized Government credit scheme for SMI, which was further expanded during the period. Utilization of the US\$59 million provided under the loan for this purpose also suffered from: the generally high effective cost of the Bank loan to subborrowers, particularly considering the foreign exchange risk; the availability of foreign currency resources through the Bank of Korea's Won conversion facility entailing no currency risk; and the adverse investment climate in 1981-82 and 1984-85 (para. 5.01).

6. In an effort to accelerate disbursement, project funds were eventually opened up to all SMI subborrowers. The loan closing date was extended by one year to December 31, 1987. Nevertheless, a substantial part of the loan amount was eventually cancelled: US\$8.8 million of the US\$29 million for SMIB, US\$12.9 million of the US\$20 million for KLB. About US\$2 million of the US\$11 million provided to SMIPC was also cancelled as a result of lower than expected consultant rates. The performance of the subprojects financed under the project was satisfactory; however, in terms of financial and economic benefits, regional and subsectoral distribution, and the relatively small sizes of subborrowers (para. 5.02).

7. The quality of the portfolio of the three DFCs involved was excellent except for 1985 and 1986 when the collection rates for foreign currency equipment loans decreased significantly. This was due primarily to increased debt service needed as a result of the Won depreciation and the relative slowdown of Korean economic growth. The financial positions of the three DFCs remained generally satisfactory throughout the project, although SMIB and CNB incurred operating losses in 1982 and 1983. This was due to adjustments in the Government's interest rate policy, which lowered the rate ceilings for lending and deposits to 10% p.a. and 8% p.a., respectively. While the lending rate reduction was effective immediately, the rates for existing deposits were unchanged until maturity, with many as high as 18% p.a. As the existing savings deposits matured, profitability improved, and in 1985 both SMIB and CNB became profitable again (para. 8.01).

8. The project entities, SMIB, KLB and CNB are soundly managed and sustainable institutions. The other entity, SMIPC has also developed its institutional capabilities in part through strong government support. As the support continues, the benefits derived from SMIPC's existence are also assured. On the whole, the project only partially achieved its original objectives. With substantial cancellations, the credit component did not achieve its original objectives. However, the project contributed significantly to the development and growth of an industrial extension service scheme. In addition, the project introduced a new sector-wide approach to Bank lending to the Korean SMI sector (para. 6.01-6.03).

9. The main lessons from the project are as follows (para. 10.01):

- (a) There is a risk involved in limiting the fund eligibility too narrowly for SMI credit projects (machinery industry subsector, in this case);
- (b) There are practical difficulties in recovering a significant portion of costs from extension services to SMIs, and;
- (c) Caution should be taken in resorting to expatriate consultant assistance in a task which is innovative in nature and requires intimate local knowledge and local language skills.

PROJECT COMPLETION REPORT

KOREA

SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-KO)

PART I: PROJECT REVIEW FROM BANK'S PERSPECTIVE

1. Project Identity

Name	:	Small and Medium Machinery Industry Project
Loan Number	:	2215-KO
RVP Unit	:	Asia Region
Country	:	Republic of Korea
Sector	:	Industry
Subsector	:	Small and Medium Industry

2. Background

2.01 Throughout the 1970s, the Government of Korea concentrated its industrial sector investment on large, capital-intensive industries, often to the neglect of small and medium industries and eventually resulting in a sharp rise in capital intensity and overcapacity. The onset of international economic recession in 1979 exacerbated the problems of excess capacity and misallocation of investment resources by triggering a substantial reduction of industrial output, with machinery industries among the most seriously affected activities. Since continued growth of the machinery industries was to play a key role in Korea's manufacturing growth during the Fifth Plan period (1982-86) as the only subsector capable of generating the necessary economic expansion, the Bank assisted the Government to address problems in the industries. Bank support focused on the small and medium general machinery producers which Bank sector work (Korea: Development of the Machinery Industries, Report No. 2130-KO, March 19, 1979) had identified as being particularly in need of technical assistance to resolve problems in areas such as choice of equipment, operating practices, labor training, product quality and level and absorption of technical know-how. Resolution of these problems was critical if Korea was to compete effectively on the world market as well as supply its own domestic manufacturing industry with the machinery and equipment which was then imported.

2.02 The provision of technical assistance and training to the small and medium industries (SMI) was considered particularly important since they had less capacity than larger enterprises to obtain assistance on their own. They also constituted the core of the general machinery industries, an area where investment in technical assistance and training was likely to have the highest pay-offs. Until this project, the availability of technical assistance to SMI was very limited. The institutional base for industrial extension services to SMI was overly fragmented and

lacked coordination, and the absence of well-articulated policies and objectives in the SMI sector left extension services without any sense of direction and focus. In 1979, the Government began to correct this situation by establishing the Small and Medium Industry Promotion Corporation (SMIPC) to concentrate technical assistance on priority subsectors, train extension officers and coordinate technical assistance services. Furthermore, under the Bank-assisted Small and Medium Industry Bank Project (Loan 2004-KO), the Government completed a comprehensive study of the industrial extension services provided to SMIs in Korea and developed a set of action programs, which were implemented under this project.

3. Project Objectives and Description

3.01 A Bank loan of US\$70 million to the Republic of Korea for the Small and Medium Machinery Industry Project was approved on December 16, 1982. The main project objectives were to: (a) provide long-term foreign currency resources to support the requirements for establishment, expansion, modernization, and balancing of facilities by small and medium machinery producers; (b) provide technical assistance and training aimed at upgrading the technical competence and productivity of machinery industries; and (c) build up SMIPC's institutional capacity for providing extension services to SMIs.

3.02 The project had three components:

- (a) Technical Assistance. This component provided foreign and domestic consultancy services to assist small and medium machinery producers upgrade their skill levels and improve their productivity by more effectively using existing technology.
- (b) Training. This component provided training courses on- and off-the-job for target groups in small and medium machinery industries to improve their skills and knowledge of production technology and enhance their productivity.
- (c) Credit. This component provided long-term investment funds to small and medium machinery industries through three development finance companies (DFCs), the Small and Medium Industry Bank (SMIB), the Korea Long-term Credit Bank (KLB) and the Citizens National Bank (CNB), all of which catered to small and medium machinery producers of various sizes, KLB for medium-sized producers (between 100 and 300 employees); SMIB for small and medium-sized producers (up to 300 employees); and CNB for small producers (up to 100 employees).

SMIPC was the executing agency for the technical assistance and training components.

4. Project Design and Organization

4.01 Prior to this operation, the Bank had extensive involvement in the Korean SMI sector. However, unlike the prior operations which had focused on institutional development of the DFCs serving the sector, this project introduced several innovations. First, it included three key financial intermediaries involved in the sector under a single project. Second, it explicitly addressed the issue of industrial extension services to SMI as a project component. Finally, it focused on developmental constraints to specific segments of the SMI, namely the machinery industries, in view of their importance and growth prospects. This represented a new Bank approach to industrial lending in Korea, having a sector-wide focus and concentrating on a number of key constraints affecting an important SMI subsector. In general, most of these innovations were introduced at an appropriate time.

4.02 The Bank sector report mentioned above contributed significantly to the conceptualization and design of the project's technical assistance delivery scheme. Under that scheme, SMIPC would develop a roster of foreign and domestic consultants, many of whom were retired or semi-retired free lance engineers, foremen and technicians. Upon the request of a client, SMIPC would diagnose problems and identify consultants who were capable of providing specific solutions. While some consultant services were provided on broader subjects such as industrial engineering and production planning arrangements, the bulk of the services were focused on the more basic problems routinely experienced by SMIs, including work method analysis (workplace layout, tools and design), machine tool maintenance, and basic skills transfer (welding, forging, foundry and milling).

4.03 As a result of prior Bank operations -- four involving SMIB, two for CNB and eight for KLB, all financial intermediaries involved in the project had relatively well developed institutional capacities to execute the credit component and to manage their assets and liabilities. Originally, the Korea Production Technology Corporation (KOPTEC) was expected to be the executing agency for the technical assistance and training components. KOPTEC, established in early 1981, was entrusted with the responsibility of administering a program of providing in-plant guidance to upgrade technological capabilities of SMIs. As part of rationalization of industrial extension institutions, KOPTEC was merged into SMIPC in May 1982, subsequent to the project appraisal mission. The Bank reappraised SMIPC and considered its institutional capabilities satisfactory.

5. Project Performance

5.01 The Credit Component. Disbursement under this component, accounting for US\$59 million of the loan amount, experienced major delays, in part due to competition from the Small and Medium Industry Promotion Fund (SMIPF), a government-subsidized credit program specifically targeted to the SMIs (Table 3 of Part III). SMIPF loans had an interest rate of 9% and were denominated in local currency, thus involved no foreign

exchange risks. On the other hand, the relending rate of the Bank loan for DFCs participating in the project was set at the standard variable rate plus a 2% spread to cover the cost incurred by the DFC in processing subloan applications and supervising subprojects. This translated into an onlending rate of 13.6% p.a. at the start of the project and 12.5% in 1984 before foreign exchange risks. The effective cost of Bank funds rose even higher after mid-1985 when the US dollar dropped in value vis-a-vis Swiss franc, German Mark and Japanese Yen. The Bank was not successful in convincing the Government to scale down the SMIPF scheme, which the latter considered to be an instrument to accelerate SMI development, compensating for relative neglect of the sector during the 1970s. Also affecting subborrower response to project credit were the accessibility of foreign currency resources through the Bank of Korea's Won conversion facility which entailed no currency risk and the adverse investment climate in 1981/82 and 1984/85 which dampened demand for credit.

5.02 In 1985, the Bank lifted one constraint to disbursement of this component by agreeing to expand the eligibility for loan proceeds to SMIs in all subsectors, and in 1986, it extended the loan closing date by a year (until December 31, 1987), to provide the implementing agencies with additional time in which to use the loan funds. These measures were not, however, sufficient to substantially increase loan commitments and disbursements, and by loan closing a substantial portion of the credit component had been cancelled: US\$8.8 million out of the original US\$29 million for SMIB and US\$12.9 million out of the original US\$20 million for KLB. Virtually all of US\$10 million allocated to CNB were disbursed.

5.03 However, apart from lower than expected utilization of funds provided under the component, the project was largely successful in terms of financial and economic benefits. Based on a sample survey, ex post financial rates of return (FRR) ranged from 22% to 30%, while ex post economic rates of return (ERR) ranged 34% to 60%. Subprojects financed by the three banks were on target in terms of project completion dates. CNB subprojects were also very accurate in terms of project cost estimates. However, subprojects financed by SMIB and KLB showed much larger fluctuations, because they included relatively large and complex projects. Regional and sectoral distribution of subprojects were satisfactory. The utilization of credit was also satisfactory in view of the relatively small sizes of subborrowers (Tables 4.A, B and C of Part III).

5.04 The Training Component. Against the original budget of US\$800,000, only US\$373,000 was disbursed. This is mostly because of training grant funds provided by bilateral sources, notably from Japan. In addition, SMIPC experienced difficulties in identifying SMI managers for overseas training since few were interested in and able to afford the time and expense for even short-term training. In all, 35 SMI technicians were trained overseas, whose training expenses were borne by SMIPC's operational expenses. The Bank funds were used to finance SMIPC's own staff training program, which included long-term overseas training of 27 extension engineers, and 45 short-term visits (Table 4.D of Part III). The domestic training provided in Seoul and at SMIPC's training facilities

at Banwohl established in 1982, were generally well attended. At present about 9,000 managerial, supervisory, engineering, and technical personnel are trained annually at Banwohl.

5.05 The Technical Assistance Component. This component, which constituted an important part of SMIPC's Production Technology Improvement Program (PROTIP), progressed smoothly. Under the program, SMIPC assisted the SMIs by (a) identifying and rectifying common problems in priority areas; (b) providing guidance and consultancy service on plant-level technology using domestic and foreign experts; (c) gathering and disseminating information on production technology required to break production bottlenecks; (d) conducting feasibility studies and providing advice to firms and financial institutions on the technical feasibility of proposed investments; and (e) arranging for domestic and overseas training to strengthen manpower capabilities in the machinery industry. These services were customer-oriented and responsive to day-to-day operational problems of the SMIs and were a major improvement over the traditional approach to industrial extension services whereby extension agents teach what they know to SMIs, with limited regard to its relevance to the specific needs of the entrepreneurs. The approach taken by SMIPC under the project to problem diagnosis, problem solving and the system of documentation were highly effective and conducive to genuine transfer of technology.

5.06 Given PROTIP's innovative nature, an expatriate consulting firm was retained to assist SMIPC to launch the foreign technical assistance program by drafting TORs, identifying and selecting foreign consultants, and assisting in developing an evaluation and monitoring systems. However, after about six months, SMIPC management decided to release the consulting firm and to utilize its internal expertise for PROTIP implementation and management. SMIPC's efforts were successful and the PROTIP program has since become one of SMIPC's most dynamic and well regarded activities.

5.07 Disbursement of the US\$10.2 million allocated for this component under the loan was somewhat slower than originally anticipated due to lower than estimated consultant man-month rates. Consequently, about US\$1.7 million was cancelled at loan closing. However, some 1,030 man-months of technical assistance services were provided, about 16% more than originally anticipated (Table 4.D of Part III).

5.08 The cost recovery ratio for the foreign consultancy services had originally been expected to increase to 40% by 1987 and 80% by 1991. The ratio only reached 16.5% in 1987, however, largely due to the lack of ability of SMIs to pay. Furthermore, unlike large firms with sophisticated management, the Korean SMIs were not used to receiving outside advice or to paying for technical advice (software), as opposed to hardware (equipment). Given narrow scopes of activities, few SMIs used PROTIP services more than a few times, thereby limiting the opportunities for SMIPC to gradually raise its overall cost recovery ratio. In an apparent

effort to redress its relative neglect of the SMI sector during the 1970s, the Government did not pursue a rigorous cost recovery policy.

6. Project Sustainability

6.01 The project entities, SMIB, KLB and CNB are soundly managed and sustainable institutions. They have maintained their financial viability and were able to mobilize resources needed to support their activities in spite of the changing macroeconomic events and policies that negatively affected them. They have also maintained their economic contribution by financing sound projects, creating new jobs in the economy and bringing about improved competitiveness and skills to the SMI sector.

6.02 The other project entity, SMIPC has also developed its institutional capabilities in part through strong government support. It has filled a gap by providing organized extension services and technical assistance to the SMI sector. It has also contributed to the development of skills of local entrepreneurs and has been most active in the areas of innovation, promotion and introduction of new technology. As the government's support for it is likely to be maintained, it can be said that the benefits being derived from the existence of SMIPC are being sustained. SMIPC's financial sustainability is however questionable. SMIPC has not pursued cost-recovery of services partly because beneficiaries found the charges burdensome and SMIPC views itself as a non-profit organization. Moreover, the Government's policy is to assist SSI to compensate for past discrimination.

6.03 Although the project only partially achieved its original objectives, the sustainability of project benefits is assured. With substantial cancellations in loan amounts, the credit component did not achieve its objectives. However, on the positive side, the project contributed significantly to the development and growth of an industrial extension services scheme. In addition, the project introduced a much needed new approach to Bank lending to the Korean SMI sector, a move away from individual DFC focussed operations to sector-wide operations focussing on specific developmental bottlenecks. The Bank SMI operation subsequent to this project (Small and Medium Industry Project, Loan 2515-KO approved in April, 1985) followed this new approach.

7. Bank Performance

7.01 Bank performance was generally satisfactory. Given the new approach introduced to Bank industrial sector lending to Korea (para. 5), project design and implementation arrangements were discussed thoroughly within the Bank during project preparation. On the whole, these discussions contributed to sharpening the focus of the project and exploring the various alternatives available prior to reaching a consensus on project design and organization. Throughout the project period, the Bank's relationships with the Government and the project executing agencies were highly satisfactory.

7.02 Bank performance in supervising the project was good, with frequent missions fielded to address emerging project issues in a professional and timely manner (Table 6.B of Part III). As the problems in the credit component became a primary concern of the supervision missions, however, the Bank's attention was largely focussed on this issue, while the technical assistance and training components received less attention. In the meantime, SMIPC had successfully developed itself into a highly dynamic organization, as a "one stop" extension service center for all SMI needs, capable of providing such varied services as the provision of technical information, assistance in identifying possibilities for joint ventures and making related arrangements, equipment leasing, and business start-up programs. Even today, SMIPC is a relatively unique organization among our client countries as an extension service institution which can effectively provide a varied range of services to SMIs. Unfortunately, Bank involvement in SMIPC's institutional development in areas other than those directly related to the project was very limited. Had the Bank been more intimately associated with the overall institutional development of SMIPC, it would have been in a better position to replicate such an organization in other client countries.

8. Borrower Performance

8.01 The three financial intermediaries, i.e., SMIB, CNB, and KLB, performed satisfactorily in executing the credit component. This was expected since these institutions had been well developed partly through previous Bank support. The quality of the portfolios of three DFCs was excellent except for 1985 and 1986 when their collection rates for foreign currency equipment loans decreased significantly. This was due primarily to increased debt service needed as a result of the Won depreciation, and the relative slowdown of Korean economic growth. The financial positions of the three DFCs were generally satisfactory throughout the term of the project, although CNB and SMIB incurred operating losses in 1982 and 1983. These losses were due to an adjustment in the Government's interest rate policy introduced in June 1982, which lowered the rate ceilings for lendings and deposits to 10% p.a. and 8% p.a. respectively. While lending rate reduction was effective immediately, the rates for existing deposits were unchanged until maturity, with many as high as 18% p.a. As the existing savings deposits matured, profitability improved, and both SMIB and CNB became profitable in 1985 and thereafter.

8.02 What proved to be beyond expectation was the excellent performance of SMIPC. At the outset of the project, SMIPC had just merged with KOPTEC, and its institutional modus operandi was yet to be clearly defined. Since then, SMIPC has developed its institutional capabilities in a relatively short period of time, and has successfully marketed its services for supporting SMI development. The strong support of the Government to SMIPC was particularly conducive to its successful institutional development. SMIPC's excellent performance in the Bank-supported PROTIP scheme and other areas of extension services enabled SMIPC to become the most important industrial extension organization, and play a much needed leadership role in this area in the country. SMIPC also

demonstrated the importance of user orientation in the industrial extension service.

8.03 Since the project involved several components and executing agencies, the Government established a Coordination Council (CC) consisting of representatives of the Ministries of Finance and of Commerce and Industry, SMIPC, and the three DFCs. CC met regularly and reviewed implementation of the project. CC also furnished progress reports with the Bank annually. CC performed an important function in drawing attention to major implementational problems and resolving many of them in a timely fashion.

9. Consulting Services

9.01 The idea of using foreign technical and skills advisors at the shop-floor level as "trouble shooters" for the SMIs was an innovative scheme when proposed initially by the Bank. This, together with the merger/reorganization of SMIPC only seven months before Board approval of the loan, prompted the Bank to request SMIPC to retain an expatriate consulting firm to make this scheme fully operational. With Bank's agreement, the consulting firm hired by SMIPC was later released, however. In dealing with SMI personnel, the consultants found that the language barrier was insurmountable, particularly outside of Seoul. And, in retrospect, neither the Bank nor SMIPC could identify a firm with the necessary expertise and experience for this innovative assignment. Subsequently, the SMIPC proved that they themselves were best qualified to do the job, and successfully completed the task. While it is understandable that the Bank took a cautious approach by insisting that SMIPC retain a consulting firm, this experience suggests that the Bank should be careful in resorting to external consulting assistance when implementing a new and innovative scheme, especially where local language and other knowledge are crucial for success.

10. Lessons

10.01 The main lessons learned from the project can be briefly summarized as follows:

- (a) risks involved in limiting the fund eligibility too narrowly for SMI credit projects (machinery industry subsector, in this case);
- (b) practical difficulties in recovering a significant portion of costs from extension services to SMIs;
- (c) cautions to be taken in resorting to expatriate consultant assistance in a task which is innovative in nature and requires intimate local knowledge and local language skills.

PROJECT COMPLETION REPORT

KOREA

SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT
(LOAN 2215-KO)

PART II: PROJECT REVIEW FROM BORROWER'S PERSPECTIVE

Small and Medium Industry Promotion Corporation



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Mr. Inder K. Sud, Chief
Industry and Energy Operations Division
Country Department II Asia Region
The World Bank, 1818H Street, N.W.
Washington, D.C 20433, U.S.A.

October 10, 1989.

Re : Loan No. 2215-OKO
Small and Medium Machinery Industry Project.

Project Completion Report


Dear Mr. Inder K. Sud :

Thank you for the parts I and III for the Small and Medium Machinery Industry Project PCR from you.

They seem to be precise and sufficient, and we think they can do without our comments.

We wish you to use the PCR which we dispatched you in April, 1988 in lieu of a part II for Loan 2215-OKO.

Sincerely yours,


Hong Kyun, Kim.
Vice president/SMIPC.

PROJECT COMPLETION REPORT

KOREA

SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT
(LOAN 2215-KO)

I. INTRODUCTION

1.01 Production Technology Improvement Program (PROTIP) is the technical assistance component under the Small and Medium Machinery Industry Project (Loan 2215-KO), which was signed on December 20, 1982 and closed on December 31, 1987. The PROTIP Program was carried out by Small and Medium Industry Promotion Corporation (SMIPC) as an execution agency under the above Loan Agreement and Project Agreement.

1.02 The technical assistance component is to provide foreign consultancy services to assist small and medium machinery manufacturers, upgrade their skill capability and improve their productivity at the plant level by using existing facilities more effectively.

1.03 In addition, the training component also consists of providing overseas training opportunities to improve their skills and knowledge of production technology as well as to enhance the technical and managerial capability of SMIPC staffs who have to conduct extension services.

II. PROJECT OBJECTIVES

Development Objectives

2.01 The objective was, by introduction advanced production techniques, to help small and medium industries achieve: (i) quality improvement; (ii) productivity increase; (iii) cost reduction; (iv) competitiveness in both the domestic and international markets; and (v) contribution to the development of new products.

Immediate Objectives

2.02 To render on the job guidance to the selected factories and to hold seminars for upgrading management and techniques in the following field.

- (a) to provide up-to-date business and technical information to the small and medium industries;
- (b) to improve the production techniques of small and medium manufactures;

- (c) to help small and medium industry maximize utilization rate of their present facilities and machineries;
- (d) to assist small and medium industry in searching and penetrating overseas markets;
- (e) to contribute to the development of new products; and
- (f) to provide advice on management rationalization and efficiency.

III. TECHNICAL ASSISTANCE COMPONENT RESULTS

Yearly Service Applications and Achievements

3.01 During the period 1983-87, the total applications for technical assistance mount up to 3,110 cases. It represents about 13.5% increase rate on a yearly average. 2,243 cases among them were successfully performed and completed during that period, and the service performance ratio market 72.12% (see Table ___ of the Statistical Annex, Part III).

3.02 Achievements, subdivided into industrial subsectors show that service performances were frequent in the machinery industry, followed by textile and chemicals, electric and electronic products, metals and others

Consultants Invited

3.03 The number of consultants invited during the implementation period amounted to 1,098 persons or about 219 persons on a yearly mean. Their total staying amount is 1,028 man-month, and average staying days per year is about 0.9 month or 27 days. The number of consultants by nationality and subsector is stated in Table ___ of Part III during the same period.

IV. OVERSEAS TRAINING RESULTS

SMIPC Staff Training

4.01 Twenty-seven engineers of SMIPC were dispatched abroad to undertake their programs in eleven fields while 42 staff completed short visit training programs in advanced countries during the period.

4.02 Overseas trainees have increased gradually each year, whereas short visit trainees have decreased a little, the reason being the greater effectiveness of overseas training when compared to short visit training. Details of the various training activities are presented in Table ___ of Part III.

SMI's Employees Training

4.03 Thirty-five technicians, divided into three missions were also dispatched to several European countries. Their respective courses consist of about three months.

V. EFFECTIVE ANALYSIS

5.01 An evaluation team consisting of extension officers from the Extension Service Group reviewed and evaluated 240 selected beneficiaries by visiting them in 1987. According to their report, the effectiveness resulting from the extension services can be summarized and quantified as follows:

(a) Management Capability Improvement:	17 cases
(b) Quality Improvement;	151 cases
(c) Cost-Saving:	38 cases
(d) Production Process Improvement:	189 cases
(e) Technical Development and Innovation:	282 cases
(f) Export and Import Substitution:	26 cases

A breakdown of the extension services can be found in Part III.

VI. BUDGET INPUTS

6.01 A loan of US\$11,000,000.00 was contracted for the Project on December 12, 1982. By the end of 1987, when the loan was closed, a total of US\$8,917,455.85 was expended during the five years, and the remaining balance of US\$2,082,544.15 was cancelled by SMIPC. The reasons for the cancellation was the availability of domestic resources and UNDP funds for the project.

6.02 The details are shown in Table 1 below.

Table 1: STATUS OF LOAN EXPENDITURE
(US\$ Dollars)

Category	Allocation	Disbursement	Cancellation
Extension Services	10,000,000.00	8,551,704.12	1,448,295.88
Overseas Training	500,000.00	365,751.73	134,248.27
Unallocated	500,000.00	-	500,000.00
Total	11,000,000.00	8,917,455.85	2,082,544.15

VII. COST RECOVERY

7.01 According to the Project Agreement between IBRD and SMIPC, SMIPC should levy, by December 31, 1986, a charge of at least 30% of the direct costs of extension services provided by foreign consultants, and each year thereafter, increase the charge levied by at least 10%, provided that by December 31, 1991, and for each year thereafter, at least 80% of the direct costs of such services are recovered.

7.02 However, as of now actual cost recovery ratio has not come up to the target. The actual ratio in 1987 was 16.5% and the planned ratio in 1988 is 20.0% which shows a 35% point increase over last year's.

7.03 There are several reasons why SMIPC did not reach the targeted levels. Among them:

- (a) SMIPC was established to provide assistance to SMIs in Korea, and by that reason, it cannot pursue profit generating projects. Therefore, increasing the cost recovery steeply (by over 10% each year) is a violation of its original objectives;
- (b) SMIs in Korea which benefitted from extension services are inferior to larger industries in size, managerial capabilities and finance. Their financial competence are limited, hence increasing cost recovery has been burdensome; and

- (c) The numbers of SMI enterprises which applied for consulting services increased. Assuming cost recovery ratios were increased to the original target, it is feared that service applications would decrease considerably each year. Hence SMIPC would not accomplish its production technology improvement program successfully.

7.04 However, in spite of the above reasons, SMIPC will do its best in recovering the direct costs. The charges levied each year will be increased and the ratio regarding actual circumstances will be decided. The targets agreed between IBRD and SMIPC will be a good guide in its decision.

VIII. FINDINGS

8.01 On the one hand, training is provided directly to a few certain production staff on the spot. However, learning from it is not limited to staff, but is also imparted to fellow workers around them. It is also dispersed to other companies of the same kind by SMIPC staff and foreign experts. On the other hand, the well-trained staff, trained overseas, disseminate their knowledge to many client companies. All activities of the project make for a far-reaching influence, although it is difficult to quantify.

8.02 The preliminary survey and many individual experiences have indicated that the Korean-born specialists, when invited to Korea for technical assistance, are more beneficial in many ways: they are willing to share their technical know-how and are eager enough to contribute as much as possible to their fatherland's industrial development. Furthermore, the language barrier automatically disappears.

8.03 The SMI client companies expressed a strong desire to acquire follow-up service on a long-term, continuous basis, even after the major service, thereby further improving and/or maintaining their product quality and management aspects.

8.04 Other findings include:

- (a) some client companies find the contribution (via cost recovery) justifiable, but burdensome to meet;
- (b) the recommended booklets are continuously used as reference;
- (c) most experts are willing to share their knowledge with the firms they work for, but some of them are reluctant to do so; and
- (d) foreign experts do not voluntarily provide technical know-how.



The Citizens National Bank

November 24, 1989

Mr. Inder K. Sud
Chief
Industry and Energy Operations Division
Country Department II
Asia Region Office
World Bank

Subject: Project Completion Report for Loan 2215-3K0

Dear Mr. Sud

Pleased to submit Part II of the Project Completion Report for the captioned loan.

I hope our comments and Part II of PCR prepared by us are helpful for you in preparing the full report of PCR.

Sincerely yours,

Kim Han-seong
General Manager
International Department

Enclosure

Preparation of Part II of PCR for Loan 2215-3K0

- A. Comment on the adequacy and accuracy of the factual information contained in Part III of the PCR.

We confirm that the factual information contained in Part III of the PCR prepared by the Bank are adequate and accurate.

- B. Comment on the analysis contained in Part I of the PCR.

The analysis contained in Part I of the PCR is agreeable to us.

- C. Evaluation of the Bank's performance during the evolution and implementation of the project.

We are satisfied with the Bank's performance throughout the project period. Especially, the expansion of the eligibility for the loan proceeds to SMIs in all subsector from those in machinery subsector in 1985 and extension of the loan closing date by a year in 1986 taken by the Bank were very appropriate for and has greatly contributed to the smooth implementation of the project.

- D. Evaluation of the Borrower's own performance during the evolution and implementation of the project.

Our bank's performance was generally satisfactory. However, the loan was disbursed about three months later than planned, which was attributable to the sluggish investment in facilities by SMIs and to limiting the fund eligibility to machinery industry subsector. The quality of CNB's portfolio and its financial position were satisfactory throughout the term of the project, although it incurred net losses in 1982 and 1983, which was resulted from the interest rate adjustment measure taken by the Government in 1982.

- E. Assessment of the effectiveness of the relationship between the Bank and the borrower during the evolution and implementation of the project.

The relationship between the Bank and us during the project period was very close. We think that the discussions with the missions frequently visited us on the problems and difficulties occurred in the project were very helpful for us to implement the project effectively.

- F. Evaluation of the performance of cofinanciers and assessment of the effectiveness of their relationship with Borrower during the evolution and implementation of the project.

This item is not connected with the concerned project of Loan No. 2215-3K0.

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248423 WORLDBANK
KLBANK K22882

NOV/6/1989

TO: IBRD
ATTN: MR. INDER K. SUD
CHIEF, INDUSTRY AND ENERGY OPERATIONS DIV.
COUNTRY DEPT. II
ASIA REGION

RE: LOAN 2215-2 KO PCR

RE YOUR FAX DATED OCT. 31ST. REVIEWING THE ABOVE PCR, AM AFRAID THAT KLB IS NOT IN A POSITION TO PREPARE A PCR FOR PART II FOR ITS MINOR PARTICIPATION IN THE PROJECT, AS MENTIONED IN THE PAGE 1 OF THE PCR.

WARMEST REGARDS,

K. P. HAHN
GENERAL MANAGER
INTL BANKING DEPT.
KOREA LONG TERM CREDIT BANK, SEOUL

248423 WORLD BANK
KLBANK K22882

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PROJECT COMPLETION REPORT
KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT
(LOAN 2215-KO)

PART III. STATISTICAL INFORMATION

PART III

1. RELATED BANK LOANS

Loan No.	Title	Purpose	Year of Approval	Status	Comments
Ln 1175	SMIB I	Finance SMI subprojects.	1975	Closed	
Ln 1507	SMIB II	Finance SMI subprojects.	1978	Closed	
Ln 1749	SMIB III	Finance SMI subprojects.	1979	Closed	
Ln 2004	SMIB IV	Finance SMI subprojects.	1980	Closed	
Ln 1829	CNB I	Finance SMI subprojects.	1980	Closed	
Ln 2144	CNB II	Finance SMI subprojects.	1980	Closed	
Ln 2515	SMI	Finance SMI subprojects.	1985	Active	Apex type loan to CNB, SMIB and SMIPC.
Ln 2071	SAL		1981	Closed	
Ln 2309	Ind. Finance	Support Govt. financial reforms, finance sub-projects in manufacturi and training.		Completed	Loan to KDB, KLB and MoF.

2. PROJECT TIMETABLE

Item	Date Planned	Date Revised	Date Actual
Identification (EPS)	January 5, 1981		July 16, 1981
Preparation	June 25, 1979	July 15, 1979	May 27, 1981
Pre-Appraisal Mission	August 24, 1981		August 24, 1981
Appraisal Mission	January 5, 1982		January 11, 1982
Loan Negotiations	April 26, 1982	May 17, 1982	September 27, 1982
Board Approval	June 10, 1982	December 2, 1982	December 14, 1982
Loan Signature	December 20, 1982		December 20, 1982
Loan Effectiveness	March 31, 1983	May 31, 1983	May 26, 1983
Loan Closing	December 31, 1986		December 31, 1987
Loan Completion	June 30, 1986		June 30, 1987

3. CUMULATIVE AND ACTUAL DISBURSEMENTS
(US\$ Millions)

	1983	1984	1985	1986	1987	1988
Appraisal Estimate	1.8	29.7	59.4	70.0	70.0	70.0
Actual	0.0	4.6	10.8	30.8	45.0	46.1
Actual as a % of Estimate	0.0	15.5	18.2	44.0	64.3	65.9

Dates of Final Disbursement:

SMIPC (Ln. 2215-0KO) - February 16, 1988
SMIB (Ln. 2215-1KO) - November 19, 1987
KLB (Ln. 2215-2KO) - May 29, 1986
CNB (Ln. 2215-3KO) - March 10, 1987

4. Project Implementation

A. Characteristics of Subprojects Financed under Loan 2215-1K0 (Small and Medium Industry Bank) (W million)

Sub- Project Number	Borrower	Nature of Subproject	Project Cost			SMIB Financing			Project Completion			Method of Procurement
			Est.	Actual	Overrun (%)	Local Funds	Foreign Funds	% of Actual Project Cost	Est. (Months)	Actual (Months)	Difference (Months)	
A-001	Shin Heung Dyeing	Expansion	2048	2219	8.6	0	1848	88.1	3	5	2	Intl. Bidding
A-002	Hanil Electric Wire	Expansion	772	801	3.8	300	272	71.4	4	5	1	
A-003	Newtech Systems	Expansion	810	762	-5.9	0	510	68.9	7	8	1	Intl. Bidding
A-004	Dai Hung	Expansion	981	821	-11.8	0	470	57.2	5	6	1	Intl. Bidding
A-005	Pungkang Metal Works	Expansion	765	779	1.8	0	458	58.8	5	7	2	Intl. Bidding
A-006	ABCO Company	Expansion	2097	1811	-13.6	0	722	39.9	6	8	2	Intl. Bidding
B-001	Jin Young	Expansion	280	300	7.1	50	175	75.0	6	6	0	Intl. Bidding
B-005	Woolim Industrial	Replacement	438	450	2.7	30	208	52.9	6	7	1	Intl. Bidding
B-008	Korea Optoelectronic	Expansion	286	270	-14.4	0	138	50.4	6	5	-1	Intl. Bidding
B-011	Tae Lim Electronics	Expansion	183	210	14.8	0	138	65.7	8	5	-3	Intl. Bidding
B-015	Bum Jin Mech.	Expansion	31	40	29.0	0	26	65.0	6	7	1	Intl. Bidding
B-018	Young Hwa Industrial	Expansion	191	211	10.5	30	120	71.1	4	5	1	Intl. Bidding
B-021	Kang Nam Machine	Expansion	172	180	4.7	0	164	91.1	4	5	1	Intl. Bidding
B-024	Shin Wha Textile	Expansion	64	102	59.4	50	52	100.0	6	6	0	Intl. Bidding
B-028	Mugunghwa Food	Expansion	75	85	13.3	10	28	44.7	5	6	1	Intl. Bidding
B-031	Woo Young Industrial	Expansion	1110	1310	18.0	200	507	54.0	4	7	3	Intl. Bidding
B-034	Hyun Dai Bone China	Expansion	291	302	3.8	0	48	15.9	4	4	0	Intl. Bidding
B-037	Bong Shin Machinery	Replacement	169	208	21.9	80	178	125.2	5	5	0	Intl. Bidding
B-040	Ace Bed Company	Expansion	497	522	5.0	50	248	56.7	6	6	0	Intl. Bidding
B-043	Dai Jin Mulsan	New	127	134	5.5	0	70	52.2	4	4	0	Intl. Bidding
B-046	Korea Alloy Valve	Expansion	477	460	-3.6	0	97	21.1	7	8	1	Intl. Bidding
B-050	Dae Keung Industries	Expansion	314	302	-3.8	0	35	11.6	6	7	1	Intl. Bidding
B-054	A-Ham Electronics	Replacement	295	348	17.3	50	133	52.9	4	4	0	Intl. Bidding
B-057	Railway Industrial	Expansion	155	148	-4.5	0	134	90.5	5	5	0	Intl. Bidding
B-060	Taebok Industrial	New	96	107	11.5	50	39	83.2	5	5	0	Intl. Bidding
B-063	Han Kook Pharma.	Expansion	134	129	-3.7	0	107	82.9	6	5	-1	Intl. Bidding
B-066	Hanil Chemical	Expansion	59	60	3.4	0	45	75.0	7	8	1	Intl. Bidding
B-069	Dae Dong Industries	Expansion	71	88	21.1	0	46	53.5	5	5	0	Intl. Bidding
B-072	Yoo Jin Industries	New	111	122	9.9	0	91	74.6	5	5	0	Intl. Bidding
B-076	Ace Bed Company	Expansion	1107	1324	19.6	80	407	36.8	4	7	3	Intl. Bidding
B-079	Shin Shung Diesel	Expansion	75	88	14.7	0	53	61.6	5	6	1	Intl. Bidding
B-082	Sun-Il Trading	Expansion	442	458	3.6	0	223	48.7	5	5	0	Intl. Bidding
B-085	Tami Electronics	Expansion	63	68	7.9	0	27	39.7	4	5	1	Intl. Bidding
B-088	Shin Wha Machinery	Expansion	162	172	6.2	50	119	98.3	7	8	1	Intl. Bidding
B-091	Han Sung Woolen	Expansion	1197	1209	1.0	100	395	40.9	6	5	-1	Intl. Bidding

A. Characteristics of Subprojects Financed under Loan 2215-2K0
(Korea Long Term Credit Bank)
(W million)

Sub- Project Number	Borrower	Nature of Subproject	Project Cost			KLB Financing			Project Completion			Method of Procurement
			Est.	Actual	Overrun (%)	Local Funds	Foreign Funds	% of Actual Project Cost	Est. (Mo./Yr.)	Actual (Mo./Yr.)	Difference (Months)	
B-8	Oriental Machinery	Expansion	478	478	0.0	-	308	63.4	n.a.	n.a.	-	Intl. Bidding
B-5/18	Oriental Machinery	Expansion	1724	1724	0.0	-	975	56.6	n.a.	n.a.	-	Intl. Bidding
B-16	Seong Han & Explosafe	New	567	567	0.0	-	369	65.1	n.a.	n.a.	-	Intl. Bidding

A. Characteristics of Subprojects Financed under Loan 2215-8K0
(Citizens National Bank)
(W million)

Sub- Project Number	Borrower	Nature of Subproject	Project Cost			CNB Financing			Project Completion			Method of Procurement
			Est.	Actual	Overrun (%)	Local Funds	Foreign Funds	% of Actual Project Cost	Est. (Mo./Yr.)	Actual (Mo./Yr.)	Difference (Months)	
B-003	Moo Rim Wire Cutting	New	92	92	0.0	0	56	60.9	10/84	11/84	1	Intl. Bidding
B-007	Yong Min	New	165	168	1.8	20	59	47.0	5/85	5/85	0	Intl. Bidding
B-019	Hwa Seoung Industries	Expansion	154	160	3.9	0	134	83.8	10/85	9/85	-1	Intl. Bidding
B-026	Nam San Co.	Expansion	129	132	2.3	0	58	43.9	11/85	10/85	-1	Intl. Bidding
B-031	Jung Yea Sa	Expansion	42	42	0.0	10	21	73.8	11/85	11/85	0	Intl. Bidding
B-042	Dai Tong Co.	Expansion	37	37	0.0	10	20	81.1	4/86	4/86	0	Intl. Bidding
B-049	Nam Yang Chemicals	Expansion	115	120	4.3	48	18	53.3	2/86	2/86	0	Intl. Bidding
B-056	Hanil Moolsan	Expansion	49	49	0.0	0	39	79.6	4/86	4/86	0	Intl. Bidding
B-063	Tae Young Moonwha	Expansion	78	78	0.0	30	35	83.3	4/86	4/86	0	Intl. Bidding
B-069	Shin Hyun Cons.	Expansion	451	448	-0.7	140	277	93.1	6/86	7/86	1	Intl. Bidding
B-073	Han Young Co.	New	60	60	0.0	4	44	80.0	4/86	4/86	0	Intl. Bidding
B-086	Ho Chun Industries	Expansion	353	350	-0.8	60	188	70.9	10/86	11/86	1	Intl. Bidding
B-091	Ah Sung Machinery	Expansion	64	64	0.0	10	44	84.4	8/86	8/86	0	Intl. Bidding
B-097	Hwa Sung Co.	Modernization	74	74	0.0	10	52	83.8	8/86	8/86	0	Intl. Bidding
B-101	Hwa Sung Equipment	Expansion	88	85	-3.4	0	78	85.9	9/86	9/86	0	Intl. Bidding
B-111	Oh Sung Boring	Expansion	71	75	5.6	0	48	64.0	2/87	2/87	0	Intl. Bidding

B. Economic Indicators of Subprojects Financed under Loan 2215-1K0
(Small and Medium Industry Bank)

Subproject Number	Borrower	Incremental Employment		Investment per Worker (W million)	Financial ROR		Economic ROR	
		Estimated	Actual		Estimated	Actual	Estimated	Actual
A-001	Shin Heung Dyeing	24	22	100.9	19.1	21.7	32.8	36.5
A-002	Hanil Electric Wire	19	17	47.1	26.6	24.0	39.9	35.4
A-003	Newtech Systems	17	19	40.1	24.5	21.5	40.9	35.0
A-004	Dai Hung	15	16	51.3	26.2	28.0	56.5	60.1
A-005	Pungkang Metal Works	20	22	35.4	28.7	24.5	57.1	51.9
A-006	ABCO Company	30	32	56.6	31.2	29.7	56.9	54.2
B-001	Jin Young	10	11	27.3				
B-005	Woolim Industrial	-	-	-				
B-008	Korea Optoelectronic	8	9	30.0				
B-011	Tae Lim Electronics	10	13	16.2				
B-015	Bum Jin Mech. Construction	4	4	10.0				
B-018	Young Hwa Industrial	6	5	42.2				
B-021	Kang Nam Machine	3	5	36.0				
B-024	Shin Wha Textile	11	13	7.8				
B-028	Mugunghwa Food	7	6	14.2				
B-031	Woo Young Industrial	-	-	-				
B-034	Hyun Dai Bone China	34	35	8.6				
B-037	Bong Shin Machinery	3	5	-				
B-040	Ace Bed Company	15	15	34.8				
B-043	Dai Jin Mulsan	7	7	19.1				
B-046	Korea Alloy Valve	30	32	14.4				
B-050	Dae Keung Industries	26	27	11.2				
B-054	A-Ham Electronics	2	3	115.3				
B-057	Railway Industrial	12	13	11.4				
B-060	Taebok Industrial	-	-	-				
B-063	Han Kook Pharmaceutical	3	4	-				
B-066	Hanil Chemical	6	6	10.0				
B-069	Dae Dong Industries	8	10	8.6				
B-072	Yoo Jin Industries	5	5	24.4				
B-076	Ace Bed Company	8	7	189.1				
B-079	Shin Shung Diesel	2	2	43.0				
B-082	Sun-Il Trading	4	5	91.6				
B-085	Tami Electronics	4	4	17.0				
B-088	Shin Wha Textile Machinery	6	5	34.4				
B-091	Han Sung Woolen	20	23	52.6				

B. Economic Indicators of Subprojects Financed under Loan 2215-3KO
(Citizens National Bank)

Subproject Number	Borrower	Incremental Employment		Investment per Worker (W million)	Financial ROR		Economic ROR	
		Estimated	Actual		Estimated	Actual	Estimated	Actual
B-003	Moo Rim Wire Cutting		5	18.4		22.0		33.6
B-007	Yong Min		3	56.0				
B-019	Hwa Seoung Industries		4	40.0				
B-026	Nam San Co.		2	66.0				
B-031	Jung Yea Sa		2	21.0				
B-042	Dai Tong Co.		2	18.5				
B-049	Nam Yang Ink Chemicals		5	24.0				
B-056	Hanil Moolsan		2	24.5				
B-063	Tae Young Moonwha Printing		4	19.5				
B-069	Shin Hyun Construction		10	44.8				
B-073	Han Young Co.		5	12.0				
B-086	Ho Chun Industries		18	19.4				
B-091	Ah Sung Heavy Machinery		2	32.0				
B-097	Hwa Sung Co.		2	37.0				
B-101	Hwa Sung Equipment		1	85.0				
B-111	Oh Sung Boring		3	25.0				

C. Financial Indicators of Subprojects Financed under Loan 2215-2K0
(Korea Long Term Credit Bank)

Subproject Number	Borrower	P R O F I T A S A %					
		Sales		Networth		Assets	
		Estimated	Actual	Estimated	Actual	Estimated	Actual
B-3/5/13	Oriental Machinery Co.:						
	1985	1.6	0.7	7.9	4.6	1.1	0.6
	1986	3.9	0.7	18.0	6.2	2.9	0.6
	1987	5.1	0.5	20.3	4.7	3.9	0.3
B-16	Jeong Ham & Explosafe:						
	1985	2.2	2.2	1.0	1.0	0.3	0.3
	1986	16.6	1.8	70.1	8.4	15.5	1.2
	1987	12.7	2.2	37.6	9.4	11.9	1.5

C. Financial Indicators of Subprojects Financed under Loan 2215-3K0
(Citizens National Bank)
(Second Year of Operations)

Subproject Number	Borrower	P R O F I T A S A Z					
		Sales		Networth		Assets	
		Estimated	Actual	Estimated	Actual	Estimated	Actual
B-003	Moo Rim Wire Cutting	4.7	5.4	27.7	27.7	10.9	10.9
B-007	Yong Min	15.1	16.0	10.9	10.9	6.2	6.0
B-019	Hwa Seoung Industries	5.7	5.9	23.8	24.0	12.9	12.7
B-026	Nam San Co.	2.7	2.8	23.1	23.5	12.1	12.2
B-031	Jung Yea Sa	10.2	10.0	54.2	54.1	18.0	18.0
B-042	Dai Tong Co.	10.4	10.0	19.7	19.2	13.8	13.5
B-049	Nam Yang Ink Chemicals	3.5	3.3	34.7	35.0	10.1	10.8
B-056	Hanil Moolsan	10.7	10.5	13.1	13.1	7.2	7.0
B-063	Tae Young Moonwha Printing	8.6	8.5	23.5	23.6	23.5	23.7
B-069	Shin Hyun Construction	2.7	3.0	16.2	17.0	4.1	4.3
B-073	Han Young Co.	25.3	25.0	22.0	22.0	13.0	13.0
B-086	Ho Chun Industries	4.7	4.7	65.9	66.0	20.8	21.0
B-091	Ah Sung Heavy Machinery	19.1	29.2	38.1	37.2	13.6	12.3
B-097	Hwa Sung Co.	27.9	27.8	17.0	17.1	17.0	17.0
B-101	Hwa Sung Equipment	14.0	12.8	27.5	26.2	11.6	11.2
B-111	Oh Sung Boring	5.2	5.9	4.7	5.0	3.5	3.0

**D. The Small and Medium Industry Promotion Corporation
Yearly Service Applications and Achievements**

Year	Number of Applications	Number of Achievements	OF WHICH	Machinery	Metal	Electric & Electronics	Textile & Chemicals	Others
1983	472	372		204	19	49	83	17
1984	539	440		207	54	86	74	19
1985	644	436		184	70	100	69	13
1986	728	486		257	55	66	82	26
1987	727	509		223	100	69	104	13
Total	3110	2243		1075	298	370	412	88

**D. The Small and Medium Industry Promotion Corporation
Use of Consultancy Services**

Year	Number of Invited Consultants (per person)				Amount of Time Spent (in man-months)			
	U.S.A.	Japan	Europe	Subtotal	U.S.A.	Japan	Europe	Subtotal
1983	36	83	20	139	46.1	77.3	61.4	184.8
1984	64	109	45	218	72.1	81	70	223.1
1985	58	138	33	229	55.8	110.3	37.9	204
1986	78	141	44	263	64.1	120.1	41.1	225.3
1987	64	148	37	249	54.5	105.8	31.1	191.4
Total	300	619	179	1098	292.6	494.5	241.5	1028.6

of which:

Subsector (per person)

Machinery	114	261	55	430
Metal	59	123	27	209
Electric/Electronics	70	128	31	229
Textile/Chemicals	47	92	52	191
Others	10	15	14	39
Total	300	619	179	1098

D. The Small and Medium Industry Promotion Corporation
Staff Training

I. Training Field		1983	1984	1985	1986	1987	Total
Overseas Training	Machinery Automation	2	0	0	1	0	3
	Metal	0	2	1	1	1	5
	Tool Manufacturing	0	0	1	0	0	1
	Press Moulding	0	0	1	0	0	1
	Electric/Electronics	0	0	2	0	2	4
	Dyeing	0	0	1	1	1	3
	Quality Control	0	0	0	1	0	1
	Marketing	0	0	0	2	2	4
	Computer System	0	0	0	2	1	3
	Glass Manufacturing	0	0	0	0	1	1
	Design Technology	0	0	0	0	1	1
Subtotal		2	2	6	8	9	27

Seminar	0	3	0	0	0	3
Short Visit Training	0	16	17	6	3	42
TOTAL	2	21	23	14	12	72

II. Destination	1983	1984	1985	1986	1987	Total
Japan	2	15	13	3	1	34
U.S.A.	0	2	5	1	5	13
West Germany	0	3	4	4	1	12
Italy	0	0	1	1	3	5
U.K.	0	0	0	3	1	4
France	0	1	0	0	1	2
Netherlands	0	0	0	1	0	1
Canada	0	0	0	1	0	1
TOTAL	2	21	23	14	12	72

III. Duration of Training	Within 15 days	16 days - 1 month	1 month - 3 months	3 months - 6 months	6 months - 1 year	1 year and over	Total
Number of trainees per period	39	10	11	7	2	3	72

IV. SMIPC Technicians/Employees' Training (per person)				
Field	Italy	France	Norway	Total
Dyeing	25	0	0	25
Electrical and Electronics	0	8	0	8
Machinery and Marine parts	0	0	2	2
TOTAL	25	8	2	35

**D. The Small and Medium Industry Promotion Corporation
Effectivity Analysis**

Type of Extension Service	Category	Number of Cases

1. Management Capability Improvement		17
2. Quality Improvement		151
	* Reduction of inferior rates	47
	* Performance improvement	47
	* Quality upgrading	44
	* Product standardization	13
3. Cost-Saving		38
	* Materials saving	10
	* Labor cost savings	16
	* Energy savings	12
4. Production Process Improvement		189
	* Operations improvement	60
	* Process improvement	58
	* Facilities improvement	51
	* Automation	20
5. Technical Development and Innovation		282
	* Manufacturing technique	165
	* New products development	48
	* Design technique	69
6. Export and import substitution		26
	* Export increase	8
	* Import substitution	18

D. The Small and Medium Industry Promotion Corporation
Status of Cost Recovery

		1983	1984	1985	1986	1987	1988 (Planned)
Ratio (%)	Division						
	Target	-	-	-	30.0	40.0	50.0
	Actual	7.0	7.6	13.0	14.7	16.5	20.0
Contribution to be paid by SMIs (Won thousands per day)	Within 20 days	30	30			70	85
	21-40 days	50	50	50	50	100	150
	Over 41 days	*	*	*	*	200	300

* Contribution is upon special decision of SMIPC president.

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-1K0)
SMALL AND MEDIUM INDUSTRY BANK
PROJECT COMPLETION REPORT
Projected and Actual Audited Income Statements, 1981-87
(In Won million)

	<u>1981</u>		<u>1982</u>		<u>1983</u>	
	<u>Projected</u>	<u>Audited</u>	<u>Projected</u>	<u>Audited</u>	<u>Projected</u>	<u>Audited</u>
<u>Income</u>						
Interest on loans	214,812	21,026	280,819	204,522	360,529	196,069
Interest on securities and deposits	19,802	36,020	24,087	34,308	29,661	28,763
Guarantee fees, commissions, etc.	13,436	7,813	16,385	8,910	19,909	8,602
<u>Total income</u>	<u>247,550</u>	<u>255,859</u>	<u>321,291</u>	<u>247,770</u>	<u>410,099</u>	<u>233,434</u>
<u>Expense</u>						
Financial expenses	171,992	178,524	221,182	184,705	283,698	157,801
Administrative and general expenses	47,982	50,529	60,185	69,130	75,940	84,638
Provision for doubtful accounts	7,000	3,389	7,000	2,691	7,000	-5,115
<u>Total expenses</u>	<u>226,974</u>	<u>232,442</u>	<u>288,367</u>	<u>256,526</u>	<u>366,638</u>	<u>247,324</u>
Income before tax	14,488	20,186	25,361	-13,742	34,143	-9,901
Income tax	1,663	2,631	3,801	78	5,119	-
<u>Net income</u>	<u>12,825</u>	<u>17,555</u>	<u>21,560</u>	<u>-13,820</u>	<u>29,024</u>	<u>-9,901</u>
<u>Appropriation</u>						
Dividends	4,924	6,027	7,712	-	10,500	-
Reserve and retained earnings	7,901	11,528	13,848	-13,820	18,524	-9,901

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-1K0)

SMALL AND MEDIUM INDUSTRY BANK

PROJECT COMPLETION REPORT

Projected and Actual Audited Income Statements, 1981-87
(In Won million)

	<u>1984</u>		<u>1985</u>		<u>1986</u>		<u>1987</u>	
	<u>Projected</u>	<u>Audited</u>	<u>Projected</u>	<u>Audited</u>	<u>Projected</u>	<u>Audited</u>	<u>Projected</u>	<u>Audited</u>
<u>Income</u>								
Interest on loans	243,402	237,714	308,939	290,874	381,185	341,273	464,952	408,523
Interest on deposits, securities and others	21,767	28,093	22,188	37,938	28,257	42,689	35,183	45,059
Guarantee fees, commissions, etc.	15,579	13,280	21,381	17,005	26,174	23,907	31,855	43,216
<u>Total income</u>	<u>280,748</u>	<u>279,087</u>	<u>352,508</u>	<u>345,817</u>	<u>435,616</u>	<u>407,849</u>	<u>531,970</u>	<u>496,798</u>
<u>Expense</u>								
Financial expenses	176,623	173,156	195,940	214,967	242,189	273,588	293,517	338,751
Administrative and general expenses	86,641	88,765	125,466	97,289	134,181	102,798	162,323	116,089
Provision for doubtful accounts	1,188	1,264	1,980	13,560	2,147	12,522	2,567	14,245
Other expenses	16,268	9,089	18,729	12,816	22,907	16,623	27,862	15,385
<u>Total expenses</u>	<u>280,718</u>	<u>272,274</u>	<u>342,095</u>	<u>338,632</u>	<u>401,424</u>	<u>405,531</u>	<u>486,269</u>	<u>484,470</u>
Income before tax	30	6,813	10,411	7,185	34,192	2,318	45,701	12,328
Income tax	-	1,292	3,118	2,685	10,253	92	13,705	6,574
<u>Net income</u>	<u>30</u>	<u>5,521</u>	<u>7,293</u>	<u>4,500</u>	<u>23,939</u>	<u>2,226</u>	<u>31,996</u>	<u>5,754</u>
<u>Appropriation</u>								
Dividends	-	1	3,841	1	3,771	1	4,300	1
Reserve	30	5,520	3,952	2,495	20,168	788	27,696	1,187
Unappropriated	-	-	-	2,004	-	1,437	-	4,566
<u>Total</u>	<u>30</u>	<u>5,521</u>	<u>7,293</u>	<u>4,500</u>	<u>23,939</u>	<u>2,226</u>	<u>31,996</u>	<u>5,754</u>

PROJECT COMPLETION REPORT
REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT
(LOAN 2215-1K0)
SMALL AND MEDIUM INDUSTRY BANK

Projected and Actual Audited Balance Sheets, 1981-87
(in Won million)

	1981		1982		1983	
	Projected	Audited	Projected	Audited	Projected	Audited
Assets						
Current Assets						
Cash and bank deposits	310,626	222,399	406,345	275,196	523,417	306,092
Investment in securities	110,952	166,616	136,094	140,545	168,126	160,825
Short-term working capital loans	706,098	782,122	931,135	1,298,755	1,216,771	1,461,073
Other current assets	30,244	32,342	37,638	36,381	46,346	109,735
Total Current Assets	1,157,920	1,203,479	1,511,212	1,750,877	1,954,660	2,037,725
Term Portfolio						
Working capital loans	203,595	276,072	262,706	40,671	323,152	79,937
Domestic currency equipment loans	255,280	267,231	334,351	312,041	421,450	485,395
Foreign currency loans	185,703	159,235	208,406	152,120	235,026	144,960
Total Term Loans	644,578	692,538	805,463	504,832	979,628	710,292
(Less: Provisions)	(7,000)	(10,200)	(7,000)	(12,514)	(7,000)	(4,274)
Net Portfolio	637,578	672,338	798,463	492,318	972,628	706,018
Property & Equipment (net)	27,471	22,085	37,145	37,217	46,268	48,001
Other Assets	34,510	58,411	39,768	120,627	45,099	148,885
Total Assets	1,857,479	1,956,313	2,386,228	2,401,039	3,018,655	2,940,629
Liabilities						
Current Liabilities						
Short-term deposits	730,383	878,557	901,000	1,146,256	1,144,440	1,375,447
SMI debentures	-	-	-	15,620	-	49,106
Borrowings from BOK	147,733	269,794	219,993	411,323	303,093	455,650
Dividend payable	4,924	8	7,712	7	10,500	7
Taxes payable	1,663	1,842	3,801	349	5,119	378
Due to correspondent banks	40,301	34,472	48,361	37,040	58,033	33,411
Accrued interest and others	181,980	168,809	227,202	127,424	285,555	1,898
Total current liabilities	1,106,984	1,353,482	1,408,069	1,738,019	1,806,740	2,080,897
Long-term Liabilities						
Savings deposits	313,020	209,374	424,000	195,968	538,560	245,967
SMI debentures	-	-	-	2,474	-	48,489
Borrowings from GOK	14,958	16,154	11,900	19,4	7,392	19,767
Borrowings from NIF	50,213	33,997	67,107	64,406	88,820	132,187
Borrowings from IRF	457	513	58	360	-	214
Borrowings from SMIPF	55,413	42,129	73,104	57,154	78,163	79,214
Borrowings from ERF	1,000	744	7,000	1,529	2,800	2,705
Other borrowings	-	-	-	3,650	-	8,511
Foreign currency borrowings	154,922	131,481	175,386	133,140	195,748	131,034
Allowance for retirements	28,500	26,783	35,804	32,866	43,108	39,737
Total Long-term Liabilities	618,483	461,175	789,359	511,211	954,591	707,825
Equity						
Paid-in share capital	107,060	107,060	150,000	137,060	200,000	147,060
Reserve and retained earnings	24,952	34,596	38,800	14,749	57,324	4,847
Total Liabilities and Equity	1,857,479	1,956,313	2,386,228	2,401,039	3,018,655	2,940,629
Outstanding Guarantees						
Short-term guarantees	22,739	32,216	27,287	65,611	32,744	113,272
Long-term guarantees	982	669	1,178	872	1,414	569
Total Guarantees	23,721	32,885	28,465	66,483	34,158	113,841
Ratios						
Total debt/equity	13.3:1	14.0:1	11.8:1	15.3:1	10.9:1	19.4:1
Long-term debt/equity	4.2:1	3.2:1	3.8:1	3.1:1	3.3:1	4.4:1
Current ratio	1.05:1	0.89:1	1.07:1	1.01:1	1.08:1	0.98:1
Reserves and provisions as % portfolio	2.4	2.4	2.6	1.5	2.9	0.4

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-1K0)
SMALL AND MEDIUM INDUSTRY BANK
PROJECT COMPLETION REPORT

Projected and Actual Audited Balance Sheets, 1981-87
(In Won million)

	1984		1985		1986		1987	
	Projected	Audited	Projected	Audited	Projected	Audited	Projected	Audited
Assets								
Current Assets								
Cash and bank deposits	335,744	375,275	402,992	358,154	343,363	689,610	343,129	722,023
Investment in securities	187,120	136,571	241,989	194,304	225,247	135,881	273,796	203,372
Short-term working capital loans	1,682,847	1,488,275	2,115,266	1,677,298	2,002,750	2,178,178	2,446,388	259,326
Other current assets	101,725	220,381	122,629	269,303	323,164	185,776	387,796	327,592
Total Current Assets	2,228,436	2,221,802	2,882,846	2,499,059	2,894,624	3,198,845	3,451,109	3,832,313
Term Portfolio								
Working capital loans	170,221	165,576	209,782	225,581	269,900	150,627	321,095	321,095
Domestic currency equipment loans	648,616	608,394	789,793	718,480	884,340	942,671	1,006,199	1,142,048
Foreign currency loans	167,438	144,934	170,343	157,024	155,624	160,513	144,985	171,687
Total Term Loans	986,275	919,904	1,169,898	1,101,085	1,299,864	1,254,011	1,472,279	1,634,830
(Less: Provisions)	(5,179)	(4,740)	(6,164)	(5,483)	(6,170)	(6,740)	(15,580)	(8,141)
Net Portfolio	981,096	915,164	1,163,734	1,095,602	1,293,694	1,247,271	1,456,699	1,626,689
Property & Equipment (net)	80,601	111,982	72,571	195,956	210,210	161,492	231,268	188,244
Other Assets								
Long-term loan deposits	53,655	55,328	59,020	63,375	69,713	70,636	76,684	79,226
Property acquired through foreclosure	43,767	47,028	54,621	59,261	70,224	49,997	73,697	30,137
Receivable from sale of foreclosed properties and others	88,230	80,360	113,359	131,403	148,573	93,128	170,859	123,413
Total Other Assets	185,652	182,716	227,000	254,039	288,510	213,761	321,240	232,776
Total Assets	3,515,785	3,431,464	4,345,691	4,004,678	4,674,038	4,821,369	5,462,316	5,862,022
Liabilities								
Current Liabilities								
Short-term deposits	1,571,988	1,478,949	1,933,512	1,725,826	1,646,900	2,233,745	2,187,700	2,639,472
Borrowings from BUK	57,420	464,786	725,690	495,519	622,278	548,297	759,179	708,018
Borrowings from CHAF	-	3,500	-	14,701	22,201	21,00	24,771	27,000
SMI debentures	581,250	97,240	74,008	65,518	93,288	70,908	110,504	80,940
Dividends payable	7	7	3,348	7	7	3	3,848	1
Taxes payable	-	1,726	3,227	2,572	3,547	16	5,984	3,989
Due to correspondent banks	40,093	34,923	48,112	41,300	49,580	77,734	59,472	142,931
Accrued interest and others	223,221	269,538	267,974	295,003	331,779	373,487	391,562	538,683
Total current liabilities	2,473,979	2,380,871	3,075,871	2,640,446	2,969,550	3,325,190	3,543,020	4,341,034
Long-term Liabilities								
Savings deposits	299,426	342,590	366,288	443,656	592,600	464,132	690,900	667,468
SMI debentures	67,535	50,871	97,937	131,228	186,858	124,906	221,340	65,785
Borrowings from GUK	19,397	22,397	12,041	25,510	29,810	31,066	21,494	67,361
Borrowings from NIF	189,187	188,716	244,017	188,999	211,599	190,980	242,536	141,108
Borrowings from SMIPF	100,014	106,990	120,074	137,100	160,100	163,197	162,400	171,444
Borrowings from KDCPF	30,899	6,325	54,589	7,595	6,098	12,251	6,996	15,992
Borrowings from BRF	4,705	4,381	5,700	5,098	11,595	5,547	14,945	3,856
Borrowings from ECPF and others	11,282	14,001	12,672	19,514	32,514	32,135	40,631	17,515
Foreign currency borrowings	158,645	137,944	164,962	153,297	151,897	182,046	141,257	21,610
Allowance for retirement and others	-	-	-	52,659	60,091	60,395	68,141	69,492
Total Long-term Liabilities	681,070	653,715	1,090,590	1,162,652	1,442,158	1,237,875	1,631,140	1,241,431
Equity								
Paid-in share capital	157,060	157,060	177,060	167,060	182,060	182,060	202,060	197,060
Reserve and retained earnings	3,676	70,018	12,170	74,518	80,280	76,744	86,096	82,497
Total Liabilities and Equity	3,515,785	3,431,464	4,345,691	4,044,678	4,674,038	4,821,369	5,462,316	5,862,022
Outstanding Guarantees								
Short-term guarantees	135,926	158,146	163,112	195,820	235,018	242,594	282,021	303,406
Long-term guarantees	683	632	81978	815	944	1,178	1,133	2,673
Total Guarantees	136,609	158,778	163,931	196,635	235,962	243,772	283,154	306,079

PROJECT COMPLETION REPORT

REPUBLIC OF KOREA

**SMALL AND MEDIUM INDUSTRY BANK
(LOAN 2215-KO)**

**Analysis of Loans in Arrears, 1981-87
(in Won Million)**

	1981	1982	1983
Number of Loans in Portfolio			
Total Number of Loans in Portfolio	28,713	39,186	53,939
Number of Loans in Arrears under 6 months	868	1,129	1,134
as % of Total Loans	3.0	2.9	1.8
Number of Loans in Arrears over 6 months	225	410	364
as % of Total Loans	0.8	1.0	0.6
Number of Loans in Arrears	1,093	1,539	1,498
as % of Total Loans	3.8	3.9	2.4
Principal Affected by Arrears			
Total Principal Outstanding	1,485,860	1,803,587	2,171,365
Principal affected by arrears under 6 months	32,456	41,412	57,685
as % of total principal outstanding	2.2	2.3	2.7
Principal affected by arrears over 6 months	10,307	16,532	13,436
as % of total principal outstanding	0.7	0.9	0.6
Total principal affected by arrears	42,763	57,944	71,121
as % of total principal outstanding	2.9	3.2	3.3
Actual Amounts in Arrears			
Arrears under 6 months	31,379	39,220	53,158
as % of principal outstanding	2.1	2.2	2.5
Arrears over 6 months	8,717	13,882	16,234
as % of principal outstanding	0.6	0.8	0.7
Total arrears	40,096	53,102	69,392
as % of principal outstanding	2.7	3.0	3.2
Collection Performance			
Arrears at beginning of year			
Principal	21,965	34,445	45,618
Interest	3,929	5,651	7,484
Total	25,894	40,096	53,102
Amount falling due during year			
Principal	6,386,751	10,045,189	12,170,032
Interest	214,100	204,846	199,913
Total	6,590,851	10,250,035	12,369,945
Collections during year (cash only)			
Principal	6,354,271	10,034,016	12,156,569
Interest	212,378	203,013	197,086
Total	6,566,649	10,237,029	12,353,655
Arrears at end of year			
Principal	34,445	45,618	59,081
Interest	5,651	7,484	10,311
Total	40,096	53,102	69,392
Collection ratio	100.6	100.5	100.6

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-1K0)

SMALL AND MEDIUM INDUSTRY BANK

PROJECT COMPLETION REPORT

Analysis of Loans in Arrears, 1981-87
(In Won Million)

	1984	1985	1986	1987
<u>Number of Loans in Arrears</u>				
Total Number of Loans in Portfolio	50,648	56,244	53,032	54,159
Number of Loans in Arrears under 6 months	1,309	685	437	570
as % of Total Loans	2.6	1.3	0.8	1.1
Number of Loans in Arrears over 6 months	250	249	750	497
as % of Total Loans	0.6	0.5	1.4	0.9
Number of Loans in Arrears	1,629	934	1,187	1,067
as % of Total Loans	3.2	1.8	2.2	2.0
<u>Principal Affected by Arrears</u>				
Total Principal Outstanding	2,408,247	2,774,638	3,370,442	4,175,693
Principal affected by arrears under 6 months	66,705	65,005	38,049	45,048
as % of total principal outstanding	2.8	1.9	1.1	1.0
Principal affected by arrears over 6 months	4,134	9,4672	31,841	23,674
as % of total principal outstanding	0.2	0.3	0.9	0.6
Total principal affected by arrears	70,839	74,472	69,890	68,722
as % of total principal outstanding	3.0	2.2	2.0	1.6
<u>Actual Amounts in Arrears</u>				
Arrears under 6 months	58,110	56,096	32,742	43,267
as % of principal outstanding	2.4	1.6	1.0	1.0
Arrears over 6 months	6,108	12,260	27,843	25,348
as % of principal outstanding	0.3	0.4	0.8	0.6
Total arrears	64,218	67,356	60,585	68,615
as % of principal outstanding	2.7	2.0	1.8	1.6
<u>Collection Performance</u>				
Arrears at beginning of year				
Principal	59,081	56,029	54,730	48,912
Interest	10,311	8,189	12,626	11,673
Total	69,392	64,218	67,356	60,585
Amount falling due during year				
Principal	13,996,350	15,169,415	18,156,131	21,308,044
Interest	232,736	243,147	337,249	412,796
Total	14,229,086	15,412,562	18,493,380	21,720,840
Collections during year (cash only)				
Principal	13,999,402	15,170,714	18,161,949	21,299,988
Interest	234,858	238,710	338,202	412,822
Total	14,234,260	15,409,424	18,500,151	21,712,810
Arrears at end of year				
Principal	56,029	54,730	48,912	56,968
Interest	8,189	12,626	11,673	11,647
Total	64,218	67,356	60,585	68,615
Collection ratio	100.5	100.4	100.3	100.3

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-SK0)
CITIZENS NATIONAL BANK
PROJECT COMPLETION REPORT

Projected and Actual Income Statements, 1982-87
(in Won Million)

	1982		1983		1984		1985		1986		1987	
	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual
Income												
Interest on local currency loans	285,787	220,371	330,710	237,953	402,635	267,329	511,851	309,713	660,190	334,638		373,756
Interest on foreign currency loans	2,097	1,619	5,232	3,034	9,697	5,263	14,203	7,543	19,558	9,972		9,314
Interest on deposits with domestic banks	25,154	21,691	25,200	10,340	34,725	14,335	41,475	23,349	45,825	31,523		33,630
Interest on securities	58,607	54,548	60,638	28,982	81,000	42,910	96,900	53,405	107,025	74,236		97,790
Interest on call loans	10,080	2,185	7,600	1,703	9,120	1,516	10,880	2,607	13,040	1,940		1,488
Total Interest Income	381,725	300,414	429,380	282,012	537,177	331,354	675,309	396,617	845,638	452,309		516,178
Dividends on investments	50	301	50	22	50	325	50	750	50	44		53
Fees and commissions	3,036	4,911	3,946	7,135	5,130	10,653	6,669	16,542	8,670	25,799		37,008
Other income	13,031	34,273	13,945	51,486	15,026	61,116	16,596	41,420	18,598	50,880		52,957
Gross Income	367,842	389,899	447,321	340,635	557,383	403,448	698,624	455,329	872,956	528,988		606,196
Expenses												
Interest on deposits	253,843	256,839	308,224	241,341	385,103	244,275	479,574	238,910	595,353	289,992		340,296
Interest on borrowings from BOK/Gov't/SMIPC	1,020	1,031	2,013	2,865	3,223	4,394	4,645	5,798	6,241	7,945		11,111
Interest on foreign borrowings	1,680	1,393	4,285	2,675	8,073	4,863	11,887	6,710	16,407	9,092		7,600
Total Interest Expenses	256,543	259,263	314,522	246,881	396,399	253,532	496,106	251,418	618,001	307,029		359,007
Contribution to Credit Guarantee Fund	1,948	2,063	2,524	2,506	3,234	2,783	4,179	3,197	5,424	3,625		4,088
General administrative expenses	90,927	87,777	109,312	109,294	130,575	131,048	160,490	143,330	198,988	155,862		172,784
Other expenses	2,900	5,518	3,486	4,485	4,183	15,302	5,020	30,269	6,024	30,308		24,901
Total Expenses	352,318	349,385	429,844	363,166	534,391	402,645	665,000	428,214	828,437	496,824		560,778
Income Before Provisions and Tax	15,524	(14,722)	17,477	(22,531)	22,992	803	32,829	27,115	44,519	32,164		45,418
Provisions for doubtful loans	5,816	2,937	5,335	3,997	7,102	-	9,332	1,033	12,334	2,549		-
Income Before Tax	9,708	(17,659)	12,142	(26,528)	15,890	803	23,497	26,082	32,185	29,615		45,418
Tax	5,145	7	6,435	136	8,421	93	12,453	1,332	17,111	15,749		16,442
Net Income	4,563	(17,666)	5,707	(26,664)	7,469	710	11,044	24,750	15,074	13,866		28,976

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-SKO)
CITIZENS NATIONAL BANK
PROJECT COMPLETION REPORT

Projected and Actual Balance Sheets, 1982-87
(In Won Million)

As of 31 December	1982		1983		1984		1985		1986		1987	
	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual
Assets												
Current Assets												
Cash and Checks	110,600	116,135	182,800	159,211	159,300	232,356	191,200	257,200	229,400	236,201		389,709
Due from Bank of Korea	61,226	83,879	76,865	99,457	97,429	109,116	119,790	49,042	149,871	176,396		287,055
Deposits from other domestic banks	63,000	45,452	130,000	57,502	180,000	43,982	182,000	82,951	191,00	84,787		179,488
Foreign currency deposits	500	4,443	900	6,699	1,500	6,104	2,500	2,182	4,000	4,182		8,448
Short term loans:												
Business loans	148,000	223,046	189,000	317,370	243,000	289,367	315,000	287,079	409,000	431,767		609,883
General populace loans	226,000	197,385	249,000	252,974	307,000	309,393	391,000	344,151	505,000	454,426		349,395
Total Short-Term Loans	374,000	420,431	438,000	570,344	550,000	598,760	706,000	631,230	914,000	886,193		959,278
Securities	13,000	44,992	137,000	64,825	212,000	168,741	167,000	280,048	119,000	673,537		784,132
Call loans	43,000	-	52,000	4,763	62,000	10,385	74,000	139,276	89,000	9,312		74,558
Current maturities												
Securities and deposits	314,000	341,300	398,000	351,783	491,000	348,872	613,000	328,019	766,000	405,460		324,521
Term loans	1,180,997	1,112,108	1,371,824	1,202,751	1,737,388	1,420,805	2,228,908	1,521,611	2,841,556	1,425,751		1,600,128
Other current assets	25,556	163,149	32,868	220,165	61,140	281,918	98,858	342,597	155,424	457,469		691,431
Total Current Assets	2,185,889	2,331,869	2,764,757	2,737,500	3,551,737	3,201,039	4,383,256	3,634,156	5,469,251	4,359,288		5,287,748
Medium-/Long-Term Assets												
Term loans:												
General populace	120,093	150,908	138,000	214,690	177,000	176,008	326,000	221,217	430,000	251,276		398,179
Working capital	169,449	132,221	196,000	187,064	211,000	219,651	146,000	295,426	200,000	308,804		306,458
Domestic currency equipment	24,000	38,533	49,000	60,625	80,000	69,617	132,000	75,717	188,000	126,709		212,949
Foreign currency equipment	33,037	20,039	61,808	32,597	93,005	43,346	128,117	56,531	166,591	66,257		37,340
Total Term Loans	346,579	341,691	444,808	493,976	561,005	508,620	732,117	648,891	984,591	753,046		954,926
Less: Provisions for doubtful loans	(15,198)	(12,287)	(20,445)	(16,050)	(27,345)	(2,550)	(36,278)	(2,861)	(47,805)	(3,180)		(1,312)
Net Term Loan Portfolio	331,381	329,404	424,363	477,926	533,660	506,070	695,839	646,030	936,786	749,866		953,614
Other medium-/long-term assets	49,828	45,639	63,882	65,062	74,399	79,597	85,907	118,940	98,707	111,058		129,979
Fixed Assets												
Premises and equipment (Net)	63,738	63,970	78,538	112,012	96,888	114,221	114,788	122,623	132,388	135,206		146,997
Total Assets	2,630,836	2,770,882	3,331,540	3,292,520	4,256,684	3,900,927	5,279,790	4,521,949	6,636,932	5,355,420		6,518,338
Liabilities and Equity												
Current Liabilities												
Mutual installment savings	-	3,028	-	18,322	-	19,205	-	17,632	-	19,348		21,151
Demand deposits	299,000	486,827	374,400	676,908	475,800	809,308	585,000	839,673	731,900	934,558		1,285,119
Time and savings deposits	1,161,700	1,063,419	1,465,000	1,015,535	1,885,000	1,014,027	2,295,000	1,276,517	2,846,000	1,673,939		2,114,955
Property formation savings deposits	81,000	33,350	111,000	24,431	165,000	18,071	230,000	14,176	300,000	10,518		6,907
Subtotal	1,541,700	1,586,624	1,950,400	1,737,196	2,525,800	1,860,611	3,110,000	2,157,998	3,877,900	2,638,363		3,428,142

Short-term borrowings	1,500	18,865	2,200	37,955	3,000	52,967	4,000	62,614	5,500	73,299	117,076
Current maturities											
Deposits	267,500	338,737	314,960	486,424	393,020	670,783	479,800	723,815	590,460	740,057	854,242
Borrowings	997	2,916	2,824	7,034	5,368	15,461	8,985	17,642	16,223	22,809	18,425
Other current liabilities	175,000	164,029	228,000	229,426	296,000	326,476	385,000	404,964	500,000	516,798	618,542
Total Current Liabilities	1,968,697	2,111,171	2,498,384	2,498,035	3,223,188	2,926,298	3,987,785	3,357,083	4,090,083	3,991,326	5,036,427
Medium-/Long-Term liabilities											
Mutual installment savings	263,800	264,558	330,400	391,328	419,800	454,150	516,100	488,983	645,800	513,128	559,580
Time and savings deposits	88,900	66,843	111,140	59,021	121,480	59,566	153,800	78,253	197,540	144,434	175,593
Property formation savings deposits	138,100	217,799	173,100	306,194	199,900	294,104	240,300	341,473	318,300	415,773	422,571
Total Term Deposits	490,800	549,200	614,640	756,543	741,180	807,820	910,200	909,699	1,161,640	1,073,335	1,157,744
Borrowings											
SDK	13,000	12,779	23,000	18,888	35,000	21,113	49,000	21,939	63,000	22,280	28,430
SHIPC	100	-	300	-	600	-	1,000	-	1,500	-	-
Government	-	2,720	-	5,043	-	6,083	-	9,388	-	13,030	15,120
ADB	12,861	7,267	27,285	15,142	49,761	24,782	58,550	28,512	83,669	33,975	15,739
IBRD	21,173	15,634	37,347	22,853	48,612	28,025	78,475	39,937	96,278	47,117	33,366
Others	-	-	-	-	-	-	-	-	-	-	-
Total term borrowings	47,034	38,400	87,932	61,926	133,973	80,003	187,025	99,776	244,447	116,402	92,655
Less: Current maturities	997	2,916	2,824	7,034	5,368	15,461	8,985	17,642	16,223	22,809	18,425
Net term borrowings	46,137	35,484	85,108	54,892	128,605	64,542	178,040	82,134	228,224	93,593	74,230
Other long-term liabilities	-	-	-	-	-	-	-	27,330	-	13,704	14,483
Total Medium-/Long-Term Liabilities	536,937	584,684	699,748	811,435	869,785	872,362	1,068,240	1,018,153	1,389,864	1,180,632	1,246,457
Provisions for Retirement Grants	43,370	34,523	53,869	31,688	66,703	40,030	88,463	59,464	123,009	73,762	93,669
Equity											
Paid-in Capital	40,000	37,623	50,000	45,247	60,000	56,131	70,000	68,456	80,000	82,223	96,001
Capital surplus	71	71	71	29,661	71	6,103	71	6,103	71	6,103	6,103
Reserves and retained earnings	23,761	2,810	29,468	(23,546)	36,937	3	45,231	12,740	53,905	21,374	39,681
Total Equity	63,832	40,504	79,539	51,362	97,008	62,237	115,302	87,299	133,976	109,700	141,785
Total Liabilities and Equity	2,630,836	2,770,882	3,331,540	3,392,520	4,256,683	3,990,827	5,279,790	4,521,949	6,636,932	5,355,420	6,518,338

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-SKO)

CITIZENS NATIONAL BANK (LOAN 2144-KO)

PROJECT COMPLETION REPORT

Projected and Actual Financial Ratios, 1982-87
(in Won Billion)

	1982		1983		1984		1985		1986		1987	
	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual
Total Assets	2,630.8	2,770.8	3,331.5	3,392.5	4,256.7	3,900.9	5,279.8	4,521.9	6,636.9	5,355.4		6,518.3
By Which:												
Short-term loans	374.0	420.4	438.0	570.3	550.0	598.8	706.0	631.2	914.0	886.2		959.3
Medium/long-term loans	1,527.6	1,453.8	1,816.6	1,696.7	2,298.4	1,929.4	2,961.0	2,170.5	3,835.9	2,178.8		2,555.1
Deposits with other banks	117.5	126.9	198.9	161.0	266.5	216.1	290.5	308.8	327.0	341.4		375.5
Deposits and Long-Term Debt												
Deposits (less than 1 year)	1,541.7	1,586.6	1,950.4	1,737.2	2,525.8	1,860.6	3,110.0	2,148.0	3,877.9	2,638.4		3,428.1
Deposits (more than 1 year)	758.3	887.9	929.6	1,243.0	1,134.2	1,478.6	1,390.0	1,632.5	1,752.1	1,813.4		2,012.0
Long-term debt:												
BOK/Government/SMIPC	13.1	15.5	23.3	23.9	35.6	27.2	49.9	31.3	64.5	35.3		43.6
ADB/IBRD	34.0	22.9	64.6	38.0	98.4	52.8	137.0	68.4	179.9	81.1		49.1
Equity	63.8	40.5	79.5	51.4	97.0	52.2	115.3	87.3	134.0	109.7		141.8
Debt-Equity Relationship												
Total debt/equity ratio	40.2:1	67.4:1	40.9:1	65.0:1	42.9:1	61.7:1	44.8:1	50.8:1	48.5:1	47.8:1		45.0:1
Long-term debt/ratio /a		14.4:1		13.5:1		10.1:1		9.3:1		9.1:1		6.2:1
Current Ratio												
Current ratio /b	1.11:1	1.1:1	1.11:1	1.1:1	1.10:1	1.1:1	1.09:1	1.1:1	1.09:1	1.1:1		1.1:1
Gross Income as % of Average												
Total Assets	15.8	14.2	15.0	11.1	14.7	11.1	14.7	10.8	14.7	10.7		10.2
Financial expenses as % of average total assets	11.0	10.8	10.5	8.0	10.4	7.0	10.4	6.0	10.4	6.2		6.0
Gross spread (gross income-financial expenses)	4.8	3.4	4.5	3.1	4.3	4.1	4.3	4.8	4.3	4.5		4.2
Income before provisions and tax as % of average total assets	0.9	-	0.9	-	0.9	0.02	0.9	0.6	1.0	0.7		0.8
Income after provisions and tax as % of average total assets	0.2	-	0.2	-	0.2	0.02	0.2	0.6	0.3	0.3		0.5
Income after provisions and tax as % of average equity	7.8	-	8.0	-	8.5	1.3	10.4	33.1	12.2	14.1		23.0
General administrative expenses as % of average total assets	3.9	3.6	3.7	3.6	3.4	3.6	3.4	3.4	3.3	3.2		2.9
Cost of deposits as % of average deposits outstanding	12.5	12.1	11.9	8.8	11.8	7.7	11.8	6.7	11.8	7.0		6.9
Cost of foreign currency debt as % of average foreign currency debt outstanding	7.4	8.1	8.7	8.8	9.0	10.7	10.1	11.1	10.4	12.2		11.7
Income from business loans as % of average business loans outstanding	16.7	14.0	16.3	11.6	16.3	11.3	16.3	12.2	16.3	11.8		11.5
Book value as % of par value	160	108	159	114	162	111	165	128	167	133		148
Income from populace loans as % of average populace loans outstanding	16.7	14.8	16.3	11.7	16.3	11.4	16.3	11.7	16.3	11.7		11.7
Income from foreign currency loans as % of average foreign currency loans outstanding	9.3	9.5	10.6	9.9	11.9	11.5	12.1	12.2	12.3	12.9		13.5

/a Long-term debt + long-term guarantees + current maturities - remunerated mutual installment savings - installment savings received under the loans on installment savings - loans covered with time deposits, installment savings deposits, mutual installment savings deposits and workers' property formation savings deposits to total unimpaired paid-in capital, surplus and reserves.

/b Current assets + current maturities - remunerated mutual installment savings to current liabilities + current maturities - remunerated mutual installment savings.

REPUBLIC OF KOREA
SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-SK0)
CITIZENS NATIONAL BANK
PROJECT COMPLETION REPORT

Analysis of Loans in Arrears, 1982-87
(in Won Million)

	1982		1983		1984		1985		1986		1987	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Portfolio Status												
Total loans outstanding	752,909	1,874,210	829,152	2,267,071	894,198	2,528,185	876,078	2,801,732	875,505	3,604,990	917,358	3,514,332
Less: Outstanding loans in grace period	1,021	29,299	1,064	37,544	1,871	38,207	1,784	62,327	2,499	97,169	3,816	114,019
Loans in repayment stage	751,888	1,844,911	828,088	2,229,527	892,827	2,489,978	874,294	2,739,045	873,006	2,967,821	913,542	3,400,313
Outstanding amount of loans affected by arrears	136,885	204,056	138,642	220,328	154,932	295,393	156,877	339,715	147,128	365,719	135,596	409,458
Arrears												
Principal	136,885	28,487	138,642	31,000	154,932	35,366	156,877	43,055	147,128	46,989	135,596	47,823
Interest		9,514		10,190		8,528		8,117		8,017		9,863
Total Arrears		38,001		41,190		43,894		51,172		55,006		57,686
Loans affected by arrears as % of total loans outstanding		10.9		9.7		11.7		12.1		11.9		11.7
Total arrears as % of total loans outstanding		2.0		1.8		1.7		1.8		1.8		1.6
Total arrears of principal as % of total loans in repayment stage		1.5		1.4		1.4		1.6		1.6		1.4
Collection rate (%)												
Principal		96.5		97.4		97.7		97.8		97.9		97.9
Interest		95.2		95.9		97.0		97.6		97.8		97.0
Total		95.8		97.1		97.6		97.8		97.8		97.8
Reschedulings and Write-offs												
Loans rescheduled	7,643	61,278	5,224	43,275	2,572	34,523	2,871	38,725	3,789	47,815	3,713	47,709
Loans written off		20		180		302		551		1,211		
Aging of Loan Arrears as of December 31, 1987												
	Number		Outstanding loans affected by arrears			Total Principal Arrears						
1-3 months	97,431		309,568			29,105						
3-6 months	14,215		52,273			10,709						
6-12 months	10,713		33,415			4,257						
Over 12 months	13,257		14,202			3,752						
Loan Amounts Consigned to the Korea Readjustment Corporation for Collection:												
	147	3,406	346	896	280	5,174	45	2,512	2	591	3	1,359

REPUBLIC OF KOREA

SMALL AND MEDIUM MACHINERY INDUSTRY PROJECT (LOAN 2215-SKD)

CITIZENS NATIONAL BANK

PROJECT COMPLETION REPORT

Collection Performance, 1982-87
(in Won Million)

	<u>Overdue</u>		<u>Maturing during</u>		<u>Total during the year</u>			<u>Actual collection</u>			<u>Collection rate (%)</u>		
	<u>Principal</u>	<u>Interest</u>	<u>Principal</u>	<u>Interest</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Equipment loan in local													
currency													
1982	151	144	21,219	7,382	21,370	7,526	28,896	21,128	7,356	28,484	98.9	97.7	98.6
1983	242	170	23,411	6,127	24,153	6,297	32,450	23,722	8,016	31,738	98.2	96.6	98.6
1984	877	329	24,712	9,380	25,589	9,599	35,248	24,712	9,380	34,042	96.6	96.6	96.6
1985	3,211	188	35,012	11,158	36,223	11,346	49,569	35,012	11,158	46,811	91.6	99.6	93.4
1986	5,599	239	41,522	12,889	47,221	13,108	60,329	41,522	12,818	54,340	87.9	97.8	90.1
1987	4,942	450	36,170	19,987	41,112	20,437	61,549	36,170	19,776	55,946	88.0	96.8	90.9
Equipment loan in foreign													
currency													
1982	4	-	894	1,637	898	1,637	2,535	863	1,619	2,482	96.1	98.9	97.9
1983	35	18	2,997	3,101	3,032	3,119	5,151	2,821	3,034	5,855	93.0	97.3	95.2
1984	667	514	6,135	5,299	6,802	5,813	12,615	6,135	5,299	11,434	90.2	91.2	90.6
1985	1,819	1,063	10,056	8,992	11,875	9,155	21,030	10,056	7,543	17,599	84.7	82.4	83.7
1986	4,054	2,108	13,854	11,012	17,913	13,115	31,028	13,854	9,972	23,826	77.3	76.0	76.8
1987	4,372	1,780	47,315	8,991	51,687	10,771	62,547	47,315	9,314	56,629	91.5	86.5	90.7
Working capital loan to ind.													
1982	7,702	3,891	351,267	84,228	358,969	88,117	447,086	349,719	85,099	434,818	97.4	96.6	97.3
1983	9,250	3,018	575,656	86,807	585,906	89,825	675,731	575,482	87,081	662,513	98.2	96.9	98.0
1984	10,573	2,789	783,044	101,521	793,817	104,290	897,907	783,044	101,521	884,565	98.7	97.3	98.5
1985	11,425	2,153	987,834	118,331	999,259	120,484	1,119,743	987,834	118,947	1,106,781	98.9	98.7	98.8
1986	10,034	1,636	1,097,279	130,411	1,107,313	132,047	1,239,360	1,097,279	130,928	1,228,207	99.1	99.2	99.1
1987	11,778	1,989	1,257,030	143,520	1,268,808	145,509	1,414,317	1,257,030	143,167	1,400,197	99.1	98.4	99.0
General Purpose loan													
1982	8,519	5,456	419,109	128,768	427,628	134,224	561,852	408,668	127,916	536,584	95.6	95.3	95.5
1983	18,960	6,306	544,569	143,628	564,529	149,936	713,465	543,595	142,906	686,501	96.5	95.3	96.2
1984	23,249	4,916	715,056	162,023	738,305	166,939	905,244	715,056	162,023	877,079	96.9	97.1	96.9
1985	26,600	4,713	888,805	179,264	895,405	183,977	1,079,382	888,805	179,467	1,048,272	97.0	97.5	97.1
1986	27,197	4,039	995,097	190,218	1,022,294	194,257	1,216,551	995,097	190,892	1,185,989	97.3	98.3	97.5
1987	26,731	5,844	930,011	212,418	956,742	218,062	1,174,805	930,011	210,813	1,140,824	97.2	96.7	97.1
Total													
1982	16,376	9,491	792,489	222,013	806,885	231,504	1,040,369	789,378	221,990	1,002,368	96.5	95.9	96.3
1983	28,487	9,514	1,148,133	241,663	1,176,620	251,177	1,427,797	1,145,620	240,967	1,386,607	97.4	95.9	97.1
1984	35,366	8,528	1,528,947	278,173	1,564,313	285,701	1,851,014	1,528,947	278,173	1,807,120	97.7	97.0	97.6
1985	43,055	8,117	1,901,707	316,845	1,944,762	324,962	2,269,724	1,901,707	317,256	2,218,963	97.8	97.6	97.8
1986	46,989	8,017	2,147,752	344,510	2,194,741	352,527	2,547,268	2,147,752	344,610	2,492,362	97.9	97.8	97.8
1987	47,823	9,863	2,270,526	384,916	2,318,349	394,779	2,713,128	2,270,526	383,070	2,653,596	97.9	97.0	97.8

5. Status of Covenants

Section	Activity	Remarks
<u>Loan Agreement:</u>		
3.03	Establish Coordination Council for the overall coordination of project	Satisfactory
<u>Project Agreement (SMIPC):</u>		
2.02	Employ a consultancy firm for assistance to implement PROTIP and to develop training programs	Satisfactory A firm was hired but subsequently released with Bank agreement
2.03	Comply with procurement procedures	Satisfactory
2.06	Exchange views with regard to project progress	Satisfactory
2.07	Appoint at least two staff members to collaborate with consultants in identifying training needs	Satisfactory
2.08	Participate in Coordinating Council	Satisfactory
3.04	Levy charges for PROTIP services and training to recover a portion of direct costs: - local consultants: 10% - foreign consultants: 30% by 1986, and gradually increased to 80% in 1991 and thereafter - top management training: 70% in 1983-86 and 80% in 1988 and thereafter	Not in compliance

5. Status of Covenants

Section	Activity	Remarks
	-on-the job training: 30% in 1983-86 and 50% in 1987 and thereafter	
3.05	Reorganize Extension Service Departments I and II	Satisfactory
4.02	Furnish audited financial reports within five months after the end of each fiscal year	Satisfactory
<u>Project Agreement (CNB, KLB, SMIB):</u>		
2.10	Participate in Coordination Council	Satisfactory
4.01	Furnish audited financial statements within five months after the end of each fiscal year	Satisfactory
4.04	Exchange views with regard to the administration, operations and financial conditions	Satisfactory

6. Use of Bank Resources

A. Staff Inputs

Stage of Project Cycle	FY79	FY80	FY81	FY82	FY83	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
Preparation	4.6	5.5	19.8	61.2	-	-	-	-	-	-	-	91.1
Appraisal	-	-	-	12.1	6	-	-	-	-	-	-	18.1
Negotiations	-	-	-	-	3.8	-	-	-	-	-	-	3.8
Lending Operations	0.3	0.4	2.7	3.6	10.6	-	-	-	-	-	-	17.6
Supervision	-	-	-	-	3.8	9.1	6.3	12.4	4.1	7.2	3.5	46.4
Completion	-	-	-	-	-	-	-	-	-	-	1.8	1.8
Administration	-	-	-	-	2.3	1.3	0.5	0.2	1	-	-	5.3
TOTAL	4.9	5.9	22.5	76.9	26.5	10.4	6.8	12.6	5.1	7.2	5.3	184.1

B. Missions

Stage of Project Cycle	Month/ Year	No. of Persons	Days in Field	Specialization Represented	Performance Rating	Types of Problems
Through Appraisal:	8/78	2	14	Industrial Economics	-	-
	10/78	1	4	Industrial Economics	-	-
	1/79	1	7	Development Banking	-	-
	3/79	1	2	Development Banking	-	-
	7/79	1	21	Development Banking	-	-
	10/79	1	5	Development Banking	-	-
	11/79	1	7	Development Banking	-	-
	7/80	1	7	Development Banking	-	-
	3/81	2	14	Development Banking	-	-
	5/81	5	7	Development Banking	-	-
				Vocational Education		
				Extension Service		
	8/81	6	21	Development Banking	-	-
	1/82	4	14	Development Banking	-	-
Appraisal through Board Approval				Industrial Economics		
				Extension Service		
Board Approval through Effectiveness	6/82	4	14	Development Banking	-	-
				Law		
Supervision:	2/83	1	7	Development Banking	Minor Problems	None
Mission 1	9/83	1	10	Industrial Economics	Minor Problems	NA
Mission 2	2/84	3	14	Development Banking	Minor Problems	NA
Mission 3	9/84	4	21	Development Banking	Minor Problems	NA
Mission 4	6/85	2	14	Development Banking	Production Engineering	
					Minor Problems	Funds Availability
					Minor Problems	Project Management
					Minor Problems	Development Impact
Mission 5	11/85	1	7	Development Banking	Moderate Problems	Overall Status
					Minor Problems	Funds Availability
					Minor Problems	Project Management
					Minor Problems	Development Impact
Mission 6	5/86	2	7	Development Banking	Moderate Problems	Overall Status
					Minor Problems	Funds Availability
					Minor Problems	Project Management
					Minor Problems	Development Impact
					Moderate Problems	Overall Status